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SOUTHERN TOPICS

www.srh.noaa.gov

Working Together To Save Lives

REGIONAL DIRECTOR

I know I speak for all our Southern Region family in expressing the shock and sorrow we feel for the loss of the seven crew members of *Columbia* as the space shuttle was lost on reentry over Texas early on Saturday, February 1. We have suffered a great loss, but the professionalism of the NWS employees who sprang into action to assist during this emergency reflects their commitment to national service. The tragedy was obvious in the sky overhead, and the Regional Operations Center at SRH was immediately staffed to help NASA and state/local agencies deal quickly with the response. A dozen WFOs from north Texas to Louisiana were instructed to archive their WSR-88D base radar data. Skies were clear and radars were operating in clear-air mode, so images graphically depicted the event and they received considerable national media attention, particularly the radar data from WFO Shreveport and our associated radar at Ft. Polk. Responding to inquiries nationwide, the ROC staff worked closely with the NWS Spaceflight Meteorology Group (SMG) at the Johnson Space Center in Houston to ensure NWS timely support to NASA with vital information.

The ROC also worked closely with the 45th Weather Squadron at Patrick AFB in Florida concerning radar data collection site plans, and with the Texas Department of Emergency Management to broadcast almost hourly Civil Emergency Messages on NWR that Saturday, instructing citizens to report, but not handle, any shuttle debris. Radar images from the shuttle's plume were made available to the media and public on the Southern Region Web site. The NOAA wind profilers again proved operationally valuable to serving the nation. Along the shuttle track the profilers recorded important data which are helping analysts uncover clues to the cause of the disaster, and working in conjunction with the Forecast Systems Lab those data were also quickly retrieved. In subsequent days meteorologists from SMG joined their colleagues at the Radar Operations Center in Norman, with support from SRH, to assist in the analysis of the radar data by NASA and the Air Force Weather Agency.



WFO HUNTSVILLE DEDICATION. The Nation's newest WFO was officially dedicated January 30 in Huntsville, Alabama. I was pleased to join the WFO staff, NWS Deputy Director John Jones, Fifth District U.S. Representative Bud Cramer, and representatives from NASA, the University of Alabama in Huntsville, the emergency management community and special guests, all of whom were on hand to witness the dedication ceremony. The WFO serves eleven counties in northern Alabama and is located in the National Space Science and Technology Center (NSSTC) Annex on the campus of UAH.

2003 MIC/HIC CONFERENCE. Last week all Southern Region MICs and HICs met at Fort Worth for a conference that by all accounts was a resounding success. Congratulations to the organizing committee comprising Gary Grice and Steven Cooper (SRH), MICs Renee Fair (Little Rock), Jim Purpura (Corpus Christi), Buddy McIntyre (San Angelo) and Israel Matos (San Juan), and WGRFC HIC Jerry Nunn. All spent countless hours pulling this conference together and did an excellent job facilitating its sessions. The theme of this year's conference was "Securing the Future." It was exciting to hear about the numerous initiatives the offices are involved in which are playing a major role in helping us secure that future for our agency. Of particular note are the mesoscale NWP projects underway that show great potential for higher resolution in local forecasts; the value of instant messaging in keeping our valued media and EM partners abreast of rapidly changing weather; and the important contribution our Internet-based training program "Jetstream" will play in preparing schools to prepare weather-knowledgeable citizens (if not future NWS employees) for tomorrow.

Included in this year's MIC/HIC meeting were AMS Executive Director Ron McPherson, Ray Ban of The Weather Channel, Leslie Chapman-Henderson of the Federal Alliance for Safe Homes (FLASH), FSU professor and Florida state climatologist Jim O'Brien, and representatives from Southwest Airlines (who stressed their reliance on NWS TAFs for flight operations). We were also joined by emergency managers Jim McCamy (North Alabama) and Keith Wells (Tarrant County, Texas), and Billy Zwerschke from the FEMA Hurricane Liaison Team. All of these invited participants emphasized in dynamic interactive sessions the value of our products and services, and they validated the fact that significant opportunities exist to work closer with our partners in the years ahead.

IFPS

The first of a planned series of IFPS Methodology Workshops was held at the Forecast Systems Lab in Boulder on January 14–16. Topics covered included the latest updates on NDFD efforts, software plans, and IFPS/NDFD "best practice" methodologies from participating offices. The attendees, including SOOs, IFPS focal points, FICs and regional program managers, were eager to share methodologies used at their offices. This initial workshop had a "western" focus, and all WR WFOs were represented, along with a few offices from the other regions. Upcoming workshops will focus on other geographic/climate areas and involve participation by appropriate offices.

The workshop featured presentations from each participating WFO of an example of its best methodology or technique for producing some portion of the digital forecast. In general, presentations were followed by helpful discussions on the benefits and limitations of each methodology. All participants agreed the workshop was a worthwhile exchange of ideas and information. FSL developers also discussed currently available and upcoming IFPS features which could aid in preparation of digital forecasts. The agenda and many of the workshop documents are at: <http://www-md.fsl.noaa.gov/IFPS/2003IFPSmethodologyWorkshop1.html>.

CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

LINUX ARTICLE. Paul Kirkwood, leader of the CWWD Dissemination Enhancement Team, recently contributed to an article titled “Predicting the weather with Linux at the National Weather Service” which appears in the on-line publication called *NewsForge*, which bills itself as the “The Online Newspaper of Record for Linux and Open Source.” Norbert Cartagena authored the article. It can be found at <http://newsforge.com/article.pl?sid=03/01/27/2324236>. Paul provided information about how Linux is being integrated into NWS operations, and how it has helped reduce costs and increase productivity.

WFO BIRMINGHAM VISITS DELTA AIRLINES. WFO Birmingham senior forecaster Jason B. Wright visited Delta Airlines’ meteorology department at their World Headquarters in Atlanta. Jason met with the staff and received a tour of the Operational Control Center. Delta meteorologists utilize NWS products in composition of their forecasts for 16 HUBS. They issue their own forecasts in a TAF-like format, with amendment criteria mainly fuel-based. Their comments related to our products addressed timeliness of amendments, accuracy of TEMPO groups, thunderstorm locations, ceiling heights, and probability of snow formation and intensity. They always appreciate interaction calls with local NWS offices.

CWSU MEMPHIS VISITS IMPORTANT CUSTOMER. Bryan Harmon and Doug Boyette visited the Memphis Air Traffic Control Tower on December 5. The visit was arranged by Gary Tigert, traffic management officer at the Memphis Air Route Traffic Control Center (ARTCC) through Mike Baker, assistant tower chief. The visit began at the Terminal Radar Approach Control (TRACON). The supervisor on duty discussed how weather affects their operations. He demonstrated the equipment they use most, mainly the Integrated Terminal Weather System (ITWS). They have direct access to the Memphis TAF, which they use mainly as a planning tool. They would be interested in a reliable 2-5 hour Gate Forecast to help them strategically prepare for their upcoming traffic rushes.

The tour concluded with a visit to the tower cab where the specialists on duty discussed their operations. They do not have tower cab wind readouts, only ASOS and the Low Level Wind Shear Alert system. Of note, a new 300+ ft tower is on the drawing board for the near future, which would replace the 160+ ft tower they now occupy.

NWS Instruction 10-809 requires semi-annual visits to any ARTCC and/or an AFSS facility in the CWA, and it also encourages all WFOs to have their forecasters visit customers and users of their mission-critical aviation products.

TULSA RECEIVES AVIATION SERVICES AWARD. WFO Tulsa earned its second quarterly Aviation Services Award for outstanding work during October, November, and December 2002. Highlights of some of their aviation related activities are:

- In October, WFO Tulsa implemented the Southern Region aviation training plan.

- Mike Teague and SOO Steve Amburn created and presented a winter weather seminar at the FAA WINGS safety program.

- The WFO has also begun work on a new outreach video: Creating TAFs and TWEBs. This will be a 20 to 30 minute video on TAFs and TWEBs for the aviation community which will focus on how the forecaster creates these important aviation products. The team on this project includes Bruce Sherbon, Nicole Kempf, Steve Amburn and Ray Sondag.

- WFO Tulsa sponsored an Aviation Weather Workshop in December, featuring speakers from the FAA Academy, the Flight Service Station in McAlester Oklahoma, the Riverside (Jones) Airport, Southwest Airlines and the Aviation Weather Center. The workshop focused on the use of NWS products by government agencies, plus commercial and general aviation interests. The FAA Academy and the Aviation Weather Center presentations concentrated more on their role in the aviation community. Nearly all the WFO staff attended this day long event. Two meteorologists from WFO Wichita also participated.

- Also in December, an Aviation Weather page was developed for the WFO Tulsa Intranet. This informative page includes some of the presentations from the WFO Tulsa aviation workshop and provides links to the aviation directives and important aviation Web sites.

Congratulations to MIC Steve Piltz and the WFO Tulsa team.

AWARDS FOR OUTSTANDING FIRE WEATHER SERVICES. The MICs from WFOs El Paso and Albuquerque were presented with outstanding service award plaques at last week's MIC/HIC conference in Fort Worth. Max Blood (El Paso) and Charlie Liles (Albuquerque) accepted the awards on behalf of their staffs. The offices were recognized for exceeding the national average of IMET dispatches - incident meteorologists assigned to provide weather support at fire sites. The two offices each had seven dispatches, nearly doubling the national average of four dispatches per office for those WFOs with trained IMETs. Such support for the fire weather program involves a tremendous sacrifice of time, talent and effort on the part of the IMETs, but also the entire WFO staff. It is also a tribute to the dedication NWS forecasters show toward services to the nation.

FIRE WEATHER

WFO Morristown Provides Fire Weather Training. David Gaffin of WFO Morristown recently participated as an instructor providing S-290 training to area foresters. He taught two sessions (Instability and Winds) at the multi-agency training class sponsored by the Tennessee Department of Agriculture, Forestry Division at their Tennessee Forestry Training Center near Shelbyville.

WFO Morristown Attends Fire Weather Coordination Meeting. In late November, David Hotz traveled to Wise, Virginia, to coordinate with representatives of the Washington-Jefferson National Forest. Dave discussed our new state plan and other operational matters, such as NWR coverage, Red Flag criteria and the FWF formats and changes.

Albuquerque Fire Weather Customer Meeting. WFO Albuquerque held a local customer meeting with various land agencies on November 5, 2002. Fire Weather program manager Brent Wachter presented a three topic PowerPoint show which included upcoming changes to the Fire Weather Forecast (FWF) product, description of a newly created Red Flag Warning/Fire Weather Watch product and Red Flag Warning verification statistics for the past year.

MIC Charlie Liles provided a presentation on PDO/El Niño and what effects these phenomena may have in store for New Mexico's winter and spring precipitation patterns. SOO Deirdre Kann followed by giving an informative presentation on the GFE formatters which gave the agencies an overall look into NWS technology. This technology will be used to create fire weather products in the future.

The meeting wrapped up with a round table discussion of many fire weather topics and included some great feedback from the customers. Almost all of the various land agencies WFO Albuquerque serves were represented at the meeting. Agency participants included Bob Shindelar (USFS/Santa Fe National Forest), Todd Richards (BLM/Albuquerque district), Gene Manwell (BIA/Jicarilla), John Kwait (BLM/Albuquerque district), Dave Bervin (New Mexico Forestry Division/Bernalillo District), Leroy Savaedra (USFWS/Bosque del Apache), Christina Romero (USFWS/Bosque de Apache) and Donald Geesling (BIA/Zuni).

WFO Mobile Hosts Fire Weather Meeting. WFO Mobile hosted an end-of-season fire weather meeting November 25, 2002 with state and federal fire management personnel from Mississippi, Alabama, and Northwest Florida. Topics of discussion included the changes in the new fire weather instructions (NWSI 10-4 series), adding local optional elements to the fire weather forecast, and the use of the NWS Spot forecast program. In addition, time was spent discussing implementation of IFPS and its impact on the fire weather forecast.

Fort Worth Fire Weather Outreach. Joe Harris presented a fire weather forecast talk to employees of USDA's Natural Resources Conservation Service (NRCS) in Meridian and Jacksboro, Texas last month. NRCS works in partnership with citizens and landowners to conserve and sustain natural resources. About 45 employees were present at the Meridian meeting, and about 40 at the Jacksboro meeting. The meeting was meant to introduce USDA employees on the agency's prescribe burn program, and covered aspects of planning, preparing and executing prescribe burns following state and federal rules and guidelines. Both presentations were met with great appreciation and thanks from many of those in attendance. This is an expanding program within Texas, especially across North Texas.

VOLCANIC ASH IN SAN JUAN. WFO San Juan is uniquely presented in the region with a challenge in aviation forecasting – volcanic ash. The island of Montserrat, located 275 miles southeast of San Juan, is home to an active volcano, called Soufriere Hills. Ash is frequently emitted into the air from this volcano, introducing a significant hazard to aviation. Ash can cause severe engine damage and even engine failure to aircraft. WFO San Juan is taking an aggressive approach to mitigate this ash hazard by providing timely information to the aviation community. Forecasters routinely analyze satellite data and wind trajectories to determine the ash risk for each of its TAF sites.

WFO San Juan also receives data and support from the Volcanic Ash Advisory Center (VAAC) in Washington, D.C., the Aviation Weather Center in Kansas City, and the local Flight Service Station during ash events. Whenever necessary, the aviation forecaster interacts with these agencies in order to issue the necessary advisories and forecasts to the aviation community. When it is determined that volcanic ash will affect a TAF site, “VA” is immediately included in the TAF and Flight Service is notified.

One major ash event occurred in late July 2001, when a major eruption occurred at Soufriere Hills. Prevailing southeasterly winds quickly transported a large amount of ash over eastern Puerto Rico, reducing the visibility and covering the area in ash. The Luis Munoz Marin International Airport in San Juan was forced to close for several hours during this major event.

NOAA WEATHER RADIO

Weather Radio Expands over the Lower Mississippi Valley. WFO New Orleans MIC Paul Trotter and WCM Frank Revitte announced that a new NOAA Weather Radio transmitter was recently installed northwest of Bogalusa, Louisiana. This new transmitter will serve all or a portion of Washington, Tangipahoa, and St. Tammany parishes in Louisiana; and Pearl River, Lamar, Marion, Walthall, and Pike counties in Mississippi.

Congressman attends Vale, Tennessee dedication ceremony. Congressman John Tanner and county executive Kenny McBride were principle speakers at the ribbon-cutting and dedication ceremony for the NWR site at Vale. This site will serve mainly Henry and Carroll counties due to the cooperative efforts of county executive Brent Greer and EMA directors Ron Watkins and Janice Newman. MIC Jim Duke and Buzz Merchlewitz of WFO Memphis were in attendance as Congressman Tanner briefed the two newspapers, two radio stations, and one television station on the connection of Homeland Security and NOAA Weather Radio.

HYDROLOGIC SERVICES BRANCH

AWS DATA. Several of our offices are involved in a test and evaluation of ingesting AWS school network data from an ftp server at FSL. We are working closely with staff in OCWWS and FSL to evaluate the procedures developed by FSL to share AWS data with NWS offices. The offices involved in the test include WFOs Fort Worth and New Orleans, West Gulf RFC, Lower Mississippi RFC, and Arkansas-Red Basin RFC. These offices will provide feedback to both FSL and OCWWS on these procedures and other requirements to support internal NWS operations and homeland security.

NEW TO OUR HYDROLOGY FAMILY. Tony Anderson joined the ABRFC on January 13, as a hydrologic forecaster. Tony received his B.S. in Geology from the College of St. Thomas in Minnesota in 1988. He received an M.S. in Range Management/Water Resources from The University of Wyoming in 1994. After completing his graduate studies, Tony conducted research work for the University of Wyoming in surface water hydrologic modeling. Prior to joining ABRFC, Tony worked for the South Dakota Department of Environment and Natural Resources as a hydrologist working in the groundwater quality program.

MPE TELETRAINING. Our Multisensor Precipitation Estimator (MPE) teletraining team is nearing completion of developing MPE training material that will be integrated with the VISITVIEW teletraining software. Once the MPE teletraining material is completed, the team members will conduct a pilot session at their collocated WFOs (i.e., WFOs Fort Worth, Tulsa, New Orleans, and Atlanta) to fine tune their training material and presentations. The goal is to begin MPE teletraining in March. We will keep you posted.

CSSA READ ACCESS FOR THE COE. The HSB, in collaboration with SOD, is coordinating with NWS Headquarters to set up a graphical user interface (GUI) to the CSSA database that will provide the Corps of Engineers (COE) with read access to B-44 information for the reimbursable Flood Control (FC) Network. This should help streamline the WFO workload associated with sending copies of B-44s to the COE and make it easier for the COE to get updated information about changes to the reimbursable FC COOP network. The goal is to have this CSSA database GUI completed sometime in February. We will keep you posted.

NEW MEXICO DROUGHT OUTREACH. Last month WFO Albuquerque MIC Charlie Liles and hydrologist Ed Polasko participated in the state meeting of the New Mexico Water Dialogue Association at the Indian Pueblo Culture Center in Albuquerque. Charlie opened as keynote speaker, discussing the drought, the role of the Governor's Drought Monitoring Committee, and the likelihood of increasingly difficult water issues for the state and the Western U.S. Presentations were followed by interesting panel discussions.

On January 21, 2003, Ed Polasko (senior service hydrologist/"droughtologist") briefed the members of the New Mexico Volunteer Organizations Assisting in Disasters (NMVOAD) on the ongoing New Mexico drought status. Recent precipitation during the last quarter of 2002 had improved the short-term drought indices, but a look at long-term precipitation deficits (two year and five year) show that problems relating to drought are likely to persist. Even though El Niño may very well bring better-than-normal spring precipitation to much of the state, the current spotty snow cover in the mountains, large forest stands of distressed and diseased trees, and near empty reservoirs could all lead to widespread problems during 2003. Members of NMVOAD include New Mexico and local Emergency Management, Red Cross, Salvation Army, Food Banks, RACES, Animal Humane Association, and various charity relief organizations.

ABRFC/COE MEETING. ABRFC conducted a meeting with the Corps of Engineers (COE) Tulsa District last month. The primary purpose of the meeting was to discuss and clarify arrangements for COE use of the NWS facility for backup of the COE's Tulsa District hydrologic forecasting capabilities. Data, communications, and operational topics of mutual interest, plus the NWS Advanced Hydrologic Prediction Service (AHPS) were also discussed. Both agencies reached understandings concerning the use of the NWS facility for COE backup purposes. Folks from ABRFC also provided a briefing about the LINUX PC-based RFC backup system developed at the ABRFC. There was also discussion about exploring a reciprocal backup arrangement for ABRFC to use its PC-based backup system using the COE Tulsa District facility. ABRFC HIC Billy Olsen also provided the Tulsa District folks with a briefing about the NWS Advanced Hydrologic Prediction Service initiative. His briefing focused on the types of short- and long-range probabilistic hydrologic forecasts that could be generated in conjunction with AHPS implementation. The COE Tulsa District stated they would be interested in long-range probabilistic hydrologic forecasts for low flow/drought applications and short-range probabilistic hydrologic forecasts for flood events.

RIVERPRO TEMPLATES/METRIC UNITS. WFO Austin/San Antonio senior service hydrologist Nezette Rydell recently updated RIVERPRO product templates for the Rio Grande Basin to automatically produce river forecast information in both English and metric units. The functionality to automatically convert hydrometeorological data values from English to metric units for product issuance was integrated into the WHFS river product formatter with the AWIPS Build 5.2.2 release. This functionality was added to WHFS to automate the units conversion process and reduce the workload associated with manually editing products to convert units prior to product issuance. WFOs Austin/San Antonio, Midland/Odessa, Corpus Christi, and Brownsville provide Rio Grande Basin drainage river forecast information in both English and metric units to satisfy international agreements between the U.S. and Mexico along the Rio Grande drainage. Thanks Nezette for developing and sharing these product templates with the other affected offices.

SCIENTIFIC SERVICES DIVISION

METED WEBSITE REDESIGNED. COMET has redesigned the meteorology education and training Website, MetEd, to provide an interface with better organization and access to all of COMET's products and services. In addition, they have added links to Web pages and sites designed specifically for communities of interest, such as forecasters in the northern latitudes, universities, etc. Whether your needs involve access to self-paced learning, information related to in-residence courses, case studies, or information about COMET's Outreach Program, the MetEd Website is your portal to all these materials. Visit the site at: <http://meted.ucar.edu>.

FLORIDA TECHNOLOGY EXPO. Forecaster Jason Deese from WFO Tampa Bay organized a Florida WFO Technology/Best Practices Expo, held in late January at the Florida Institute of Technology campus in Melbourne. Forecasters from the other Florida WFOs participated in the two-day workshop, which served as an excellent forum for a highly beneficial exchange of operational practices, discussion of local applied research projects, and sharing of concepts among the WFOs. The agenda comprised very pertinent topics, including outreach and verification, establishing and sharing data networks, assimilation of local data into locally run mesoscale models, applications development, and IFPS/GFE problems and solutions. FIT faculty and meteorology students benefitted from this opportunity to participate in an exchange of NWS operational issues, and their hospitality was appreciated by all attendees. A Web page has been set up to address issues which came up at the workshop and to facilitate continued exchange of information. Congratulations Jason for the leadership you provided in setting up the expo.

ACADEMIC ACHIEVEMENT. Congratulations to WFO Miami SOO Pablo Santos, who recently successfully defended his dissertation at Florida State University and will be awarded a PhD in meteorology. Pablo's thesis is titled, "Seasonal Atmospheric Water Budget Variability Over the Gulf of Mexico-Caribbean Sea Basin from Satellite Observations." Although it was followed by a few years of hard work while he was a forecaster at WFO Jacksonville, and more recently the SOO at Miami, Pablo began the academic studies toward his advanced degree while on a full-time UAP assignment at FSU.

ON SPECIAL ASSIGNMENT. University of Oklahoma professor, and former WFO Norman MIC, Dr. Kenneth Crawford has begun a six-month appointment as a Senior Visiting Scientist at NWSH's Office of Science and Technology. As part of this assignment Ken will help develop a concept for improving the nation's observing system. Having provided the leadership for development and operation of the Oklahoma Mesonet, he is certainly well equipped for the task. Welcome back to the NWS, Ken.

NEW SOO. Kurt Van Speybroeck has joined the ranks of Southern Region SOOs, assuming the position at WFO Brownsville vacated when former SOO Shawn Bennett became the office's MIC. Curt is a graduate of the University of Colorado and the Metropolitan State College of Denver, and gained experience during that time as a research assistant at NCAR's Mesoscale and Microscale Meteorology Department. He interned in the early 1990s with the NWS at WSMO Centreville, Alabama, and Brownsville before becoming a forecaster at the NSSFC (later the Storm Prediction Center). Kurt then served as senior forecaster at WFO Albuquerque and Brownsville. Welcome to the SOO team, Kurt.

REVIEW OF NCEP PRODUCTION SUITE: PRESENTATIONS AVAILABLE ONLINE. The Environmental Modeling Center (EMC) has posted the presentations made at last month's Annual Review of the NCEP Production Suite. This meeting features a review of the performance of each of the operational models, upcoming changes in the models and their data assimilation systems, and reviews and requirements from NCEP's internal customers. The presentations were made by each of the EMC branches, representatives of the NCEP Service Centers and the NWS regions. Additional presentations were made by the NCEP Operations Center and the NWS Office of Science and Technology.

The URL is <http://www.emc.ncep.noaa.gov/NCEPreview2002/index.htm>. Each presentation can be viewed as an online HTML presentation, or downloaded in its native form (PowerPoint or Corel Presentations) for local playback.

REMINDER: NEW GOES-EAST SATELLITE. The GOES-12 satellite is scheduled to replace GOES-8 as the GOES-EAST satellite on March 31, 2003. Launched April 13, 1994, GOES-8 has provided weather data for an extended period of time. However, partly due to upcoming fuel limitations to keep GOES-8 within North/South inclination specifications, GOES-12 is scheduled to replace GOES-8 as the GOES-East operational spacecraft on March 31, 2003. Recall that there are significant differences on GOES-12 as compared to GOES-8 through GOES-11. (The 6.7 micron water vapor channel resolution improves from 8 km to 4 km and 12.0 micron band at 4 km is replaced with a 13.3 micron band at 8 km. Additional information can be found at: <http://www.osd.noaa.gov/Gvar/gvardownload.htm>).

UPGRADES TO SHORT RANGE ENSEMBLE WEB SITE. Requested by many WFOs, a preliminary zooming capability has now been added to the Short Range Ensemble Forecast Web page. A more sophisticated interface might be developed in the future, so any comments are welcomed. (Note: please click the Zoom button slowly; otherwise, your Web browser might lock up.)

EXPERIMENTAL VERSION OF RUC MODEL. Geoff DiMego and Ralph Petersen have requested some field offices to volunteer to evaluate the new parallel Rapid Update Cycle (RUC) model with the 3DVAR initialization. Some of the greater differences between the experimental 3DVAR version and the operational RUC occur in or close to the NWS Southern and Western regions. Geoff and Ralph would like to know what forecasters think about them before proceeding with implementation plans.

The output is available at <http://www.emc.ncep.noaa.gov/mmb/ruc2/para/index.html>

In particular, they are very concerned about the low-level analyses over Mexico and the southwestern U.S (southern California eastward to western Texas). They would appreciate your evaluation concerning which is better in these regions.

Geoff and Ralph realize that a lot of forecasters don't like looking at Web graphics, so they can make the gridded output available in the GRIB format if that would facilitate things. Any assistance you can provide would be greatly appreciated. Please contact Bernard Meisner in SSD, or Geoff and Ralph directly, if you have any comments or questions.

PRECIPITATION TYPE IN AWIPS BUILD 5.2.2. Good News! AWIPS 5.2.2, which field sites will load in the next month, will have a field called "Precip Type" in the Volume Browser. When chosen, it will display icons for precipitation type for:

- Eta (MesoEta/EtaWx) - Baldwin freezing and frozen output
- RUC - Internal Microphysics Output
- LAPS - Internal Ramer Technique Output
- WsEta - Baldwin Output (SN,RA,FZRA,IP)
- NGM - Ancient Indian technique based on eagle flight paths.

UPDATED MODEL DIAGNOSTICS PAGE FROM HPC. In response to comments from the WFOs and other users' feedback, the Hydrometeorological Prediction Center updated their model diagnostics Web page (<http://www.hpc.ncep.noaa.gov/html/model2.shtml>).

The update page features:

- HPC Model diagnostic discussion
- Interactive loops of the model verification
- Interactive pages of model bias
- Archive of EMC Synergy Meeting highlights (a short term roadmap of planned model implementations)

The list of observed model biases has been updated and now allows users to click on a model and list the perceived model bias. This page also allows field forecasters to submit a perceived model bias for evaluation and subsequent posting to the Web page.

AMS ANNUAL MEETING. Southern Region offices are being well represented this week at the American Meteorological Society Annual Meeting in Long Beach, California. A technical attachment (<http://www.srh.noaa.gov/topics/attach/pdf/ssd03-04.pdf>) this month shows the variety of papers and posters that are being presented. In addition, a featured session at this year's meeting will introduce the broad spectrum of meeting attendees to IFPS and NDFD products. Some of the SR participants will be manning the NWS booth to assist in that.

NEW PAPER. WFO Morristown forecaster David Matson authored the paper, "QPF Verification and Bimodal Precipitation Patterns Observed at WFO Morristown, Tennessee," which appears in the latest issue of the NWA's *National Weather Digest*. Congratulations, Dave.

SYSTEMS OPERATIONS DIVISION

SYSTEMS INTEGRATION BRANCH

ELECTRONICS PROGRAM MANAGER CHANGE. Please join us in welcoming Martin Garcia back to SRH as the new EPM. Martin returns to the EPM position after a sojourn as ESA at WFO Amarillo, where he has gained valuable field experience in all major areas of the electronics program. Also, please join us in wishing Steve Baker, our current EPM, well as he returns to the WFO/RFC in Fort Worth as ESA. Steve has done an outstanding job as regional EPM over the last several years. Steve will be officially transferred to the WFO/RFC the latter part of this month and Martin will be assuming the EPM duties the latter part of March.

TELECOMMUNICATIONS. Four NWR circuits for Russellville, Henagar, Cullman and Huntsville, Alabama were transitioned successfully this month to the new Huntsville WFO from WFO Birmingham. The transmitters are operational and under the control of the Huntsville office at this time. Orders to disconnect these four transmitter sites from Birmingham will be submitted shortly. This will complete the communications installation for WFO Huntsville.

New circuits have been ordered for NWR transmitter sites at Greenville and Oneonta, Alabama; Palatka, Florida; and Riviera, Texas. These should be installed by mid-February. We are tracking the circuit installations closely in coordination with the transmitter installations to insure timely delivery of the service. The circuits for Vale, Tennessee and D'Hanis and Rio Grande City, Texas, were accepted by Southern Region last month and the transmitters are now operational at these sites.

We are initiating a major task in the telecommunications area to inventory each field office's phone lines, circuits, and other comms, and to bring all supporting documentation for these services up to date. Each office's support and cooperation will be needed to complete this project.

IT. The NWS request for a wavier from the DOC password policy for our major operating systems was not approved. We are waiting to see how NWSH intends to implement the policy for national systems such as AWIPS, CRS, ASOS, etc.

The NOAA mandated SANS training course time is nearing completion. So far 16 people have finished the course. However, quite a few students have yet to complete the course. Weekly status updates are being sent to students and supervisors.

Last month, we were informed of a rapidly spreading Internet Worm that has been causing traffic slowdowns and infecting servers. We requested a list of all offices running Microsoft Windows 2000 servers and had them apply the current security patches.

The Directory Electronic Mail servers were upgraded with the latest Netscape version 4.16. All upgrades went smoothly and we made use of the e-mail system downtime to do quarterly maintenance on the Messaging servers. Our total down time was only 3.5 hours.

Several e-mails and phone calls about e-mail scams and hoaxes have been received along with several people complaining of inappropriate material being sent to them this past month. Anytime you receive this type of e-mail it is very important to forward them to abuse@noaa.gov and inform your ITSO or supervisor. You should then delete the material from your inbox and your sent box where you forwarded it on to abuse@noaa.gov. Be sure to also remove it from your trash file. Do not forward copies of the e-mail to anyone other than the abuse address.

The Messaging Operating Center uses the address information from these e-mails along with their content to configure the spam filters on the gateway access points. This is a continuing process, so the better information they get the better the filters will work in the future

AWIPS. All SR WFOs will have installed IFPS Build 12.2 (an Operational Build 1 pre-requisite) by mid-month, with IFPS 13 alpha testing beginning the week of the 10th. The second OB1 pre-requisite is the addition of the Linux Pre-Processor (PX) which will serve to lighten the load of the highly taxed Data Servers (DS). Two Linux Servers (PX1 and PX2) will be added to increase server performance by moving Satellite, Grib, and Bufr Ingest to the new servers. The PX installations are currently scheduled to begin the end of the month, coincident with the start of OB1 installs.

Operational Build 1 will be primarily a build of fixes with a few new additions. Some of the more noteworthy additions include:

- Ability to select marine and land based zones in WWA.
- Ingest and display of ACARS (MDCRS) data.
Plots and terminal ascent/descent soundings.
- POES Bufr soundings.
- New Radar products include: High Res (8 bit) SRM, User Selectable Layer Reflectivity (ULR), and the display of Clutter Likelihood Products.
- Upgrade of Linux Workstations to RedHat 7.2 Operating System.
- RFC Archive Server (March)

NWR. Southern Region was at various stages of NOAA Weather Radio installations during January. Baxley, Georgia and Nachitoches and Bogalusa, Louisiana, were fitted with new dual Crown 1kw transmitters. Baxley will be receiving broadcast audio from WFO Jacksonville and Nachitoches, Louisiana will be serviced by the WFO Shreveport and Bogalusa, Alabama, receives its audio input from WFO New Orleans. Oneonta, Alabama, a dual Crown 300w transmitter was installed January 16, 2003 and will receive its audio from WFO Birmingham.

UPPER AIR. Regional systems specialist Charlie Lake performed calibrations and alignments, shot limiting angles, and verified the theodolite orientation of the upper air system at Del Rio, Texas. Our thanks go to the electronic technicians at WFO Austin/San Antonio and the Del Rio operations personnel for the excellent upper air system operations at the site.

WSR-88D. Regional systems specialist Joe Villescuz coordinated with the Radar Operations Center WSR-88D team to assist WFO Miami electronics technicians in what appeared to be a nagging intermittent power supply malfunction. The ROC and WFO technicians troubleshoot, replaced part, and performed calibrations to bring the Miami WSR-88D up to optimum performance. Our thanks to all involved.

OBSERVATIONS AND FACILITIES BRANCH

KEESLER AFB WSR-88D RELOCATION. The Radar Operations Center has nearly completed construction of the new WSR-88D in Brandon, Mississippi (KDGX). Southern Region has procured an authorized frequency for transmission. Current plans call for the radar to begin a 72-hour operational test the week of February 10. Modifications are being made to the existing Open RPG at WFO Jackson which will allow it to ingest data from either the existing Jackson WSR-88D or the new KDGX radar for a short period of time until the new WSR-88D is operationally accepted. SRH will work with WFO Jackson to ensure that a seamless transition occurs with regard to notification of NWS customers and users. In addition, SRH has the action item of site restoration of the old WSR-88D site at Keesler AFB.

WFO HUNTSVILLE RADAR COVERAGE. WFO Huntsville began operations on January 14, as planned. All WSR-88D data products were received at WFO Huntsville as needed. In addition, WFOs Morristown, Nashville and Birmingham are also receiving WSR-88D data as associated users from the Hy-Top, Alabama (KHTX) WSR-88D. This means that relocation of the HTX ORPG from WFO Birmingham to WFO Huntsville was also successful. FAA WARP circuits have also been verified as operational to the appropriate FAA Air Route Traffic Control Center (ARTCC).

WEST MEMPHIS AIRPORT ASOS COMMISSIONING. In response to a new FAA requirement, the ASOS at West Memphis, Arkansas (AWM) was commissioned on January 15. The electronics staff at WFO Memphis was responsible for overseeing the ASOS installation and completing all final connections, calibration, etc. SRH partnered with NWSH, the FAA Southwest Region, and WFO Memphis to site, install and commission the system.

ASOS PROCESSOR UPGRADE AND PLANNED PRODUCT IMPROVEMENT. Several SRH sites continue to participate in the Operational Test and Evaluation (OT&E) of the new ASOS processor upgrade. After a brief hiatus due to persistent problems with lockups and warm starts, the latest ASOS software (Version 2.7A-3) has been installed at three additional sites in Southern Region (GNT, ASD, SSI), bringing to six the number of SR sites using this new software version. NWSH continues to work with the regions to identify problems and expand the number of OT&E sites.

SISTER-SISTER WFO BACKUP IMPLEMENTATION. Last month, SRH implemented a new sister-sister backup plan. This means WFOs are paired and assume all backup responsibility for their paired WFO, either as the primary backup or the secondary backup. To implement this, SR worked closely with the Radar Operations Center to ensure each WFO has adequate dial-up access to all necessary WSR-88Ds in order to successfully perform backup duties as needed.

KEY WEST DP4 CONSTRUCTION APPROVAL. The Facilities Oversight Committee met in early January to review the Key West Decision Package 4 and voted to approve the construction of the new WFO. A memorandum of understanding with the Navy in Key West is under legal review by both the NWS and the Navy at this time. The architect has completed the 100% drawing package and will be sending it to the Navy procurement office for distribution to bidders. The contract award is planned for March 2003 with construction planned to begin in April.

NEW HVAC CONTROL SYSTEM FOR WFO EL PASO. Modifications to the HVAC control system at WFO El Paso are complete and commissioning began last month. The new control system has an easily understood graphics display and will be accessible from any PC in the office, along with designated persons allowed to access it from inside the NWS firewall, including facility engineering technician Steve Davis at WFO Lubbock, Terry Brisbin at SRH, and Mike Millhausen at NWSH. A similar system is now operating at WFO Jacksonville and other sites nationwide. These upgrades are being funded by OOS.

ENVIRONMENTAL COMPLIANCE AND SAFETY. NOAA has contracted with DuPont Corporation for safety training courses for senior leaders to be held at three sites around the region, and a fourth may be added later. These two-day courses are for MICs, HICs and other senior management personnel and will be completed during FY03/04. A separate four hour safety training course titled “Stop Taking Avoidable Risks” will be offered to existing safety focal points with the goal of expanding it later to other NWS employees in a distance learning format as funding permits.

Initial Fall Protection classes are now being scheduled at NWSTC for new employees who are required to climb as part of their job description, typically ETs and FETs. Recertification for existing climbers is now being scheduled through OOS, however, only about half of the Southern Region certified climbers will be able to attend this year unless additional funding is received. Those personnel have been notified and need to respond with their preferred class dates.

A budget estimate was prepared for FY03 ECS spending and includes such items as the DuPont training above, hazardous waste disposal, safety equipment, CPR training, wire weight safety modifications, fuel tank integrity tests, a possible focal point conference, and other items. The \$570K total for all ECS items may be impacted by NWS funding constraints in FY03.

WFO Fort Worth warning coordination meteorologist Gary Woodall has agreed to speak on severe weather topics at the DFW Federal Safety Council meeting at UT-Arlington in April. This organization is replicated in other cities as a group of civil and military safety and health professionals and employees with ECS as a collateral duty. This will be Gary’s second opportunity to speak to this group about severe weather. Last month’s topic on terrorism was presented by the special agent in charge of counter-terrorism for the Dallas FBI office.

GALVESTON COUNTY EMERGENCY MANAGEMENT FACILITY. A meeting between the National Weather Service and the Galveston County Emergency Operations Center was held last month to review and discuss the 50% design submittal. Most of the discussions in this meeting revolved around the mechanical, electrical and communication requirements.

Due to local codes and regulations a retainment pond must be placed at or near the new site to catch storm runoff. Galveston County is trying to secure an agreement with the local land owner next to the site to build a three acre retainment pond on the adjacent property. This will cause a delay for construction which is now tentatively scheduled for July or August 2003.

WFO ALBUQUERQUE LIGHTNING SYSTEM. On October 24, 2002, WFO Albuquerque experienced a lightning strike which caused damage to office equipment estimated at \$43,000. The office is leased by NWS from the local airport. A site inspection revealed that the facility did not have lightning protection as called for in the construction drawings, specifications and lease agreement. NWS technicians and engineers are working with MASC to provide recommendations to local airport officials for installing a viable lightning protection system.

ADMINISTRATIVE MANAGEMENT DIVISION

DIVERSITY/EEO AND COMMUNITY OUTREACH ACTIVITIES

Bill Proenza participated in the NOAA-CREST/NASA-EPSCOR Joint Symposium in Climate Studies held at the University of Puerto Rico in Mayaguez Puerto Rico, January 9-11, 2003. Bill was accompanied by WFO San Juan MIC Israel Matos who gave a presentation on the WFO operations and involvement with the UPRM. The objective of the joint symposium was to bring together researchers, faculty, and students interested in climate change studies with emphasis on regional climate. The meeting attracted more than 30 researchers collaborating with the NOAA sponsored Cooperative Remote Sensing Science and Technology (CREST) at the University of New York and the Puerto Rico NASA-EPSCOR Caribbean Climate Research Group. A wide variety of topics in climate studies was covered including climate change analysis, regional climate modeling, remote sensing applications, statistical predictions of climate change, impact of climate change in cities, among others.

WFO BIRMINGHAM forecaster Faith Borden gave an office tour and taught a weather section to 72 home school students and parents. She explained to the Hope Christian School students how the National Weather Service performs its mission and how information is disseminated around the world. She taught severe weather causes and preparedness, and how to remain informed.

Faith also provided weather instruction to Boy Scouts at the annual Shelby County Boy Scout Merit Badge Day. Boy scouts from Alabama, Georgia, and Mississippi converged to obtain various merit badges. Faith taught the concept of fronts, cloud types, severe weather, and safety. Following the talk, each boy was required to give a five minute presentation about camping safety, including severe weather.

SOUTHERN REGION WORKFORCE TRANSACTIONS			
<u>JANUARY 1 - 31, 2003</u>			
Southern Region Losses			
<u>Name</u>	<u>From (Office)</u>	<u>Action/Transfer</u>	<u>From Title/Grade</u>
Richard Hagan	WFO BRO	Retirement	MIC, GS-14
James F. Blair, Jr.	WFO FFC	Retirement	HMT, GS-11
Roger Willis	WFO MLB	Retirement	ESA, GS-13
John Elmore	WFO SHV	Retirement	Senior Forecaster, GS-13
Howard Vasalech	WFO FWD	Retirement	ESA, GS-13
Stephen Grove	WFO EYW	Resignation	El Tech, GS-11

Joe Barrett III	WFO EYW	Resignation	Senior Forecaster, GS-13
John Broyles	WFO AMA	Transfer to SPC	Forecaster, GS-12
Manfred Hellwagner	WFO OHX	Retirement	HMT, GS-11

Southern Region Gains			
<u>Name</u>	<u>To (Office)</u>	<u>Action/Transfer</u>	<u>To Title/Grade</u>
Patrick Blood	WFO HGX	New Hire	Met Intern, GS-7
Anthony Anderson	RFC TUA	New Hire	Hydrologist, GS-11
James Jackson	CWSU ZHU	Transfer from AWC	Meteorologist, GS-12
Morris C. Bennett, Jr.	WFO TAE	New Hire	El Tech, GS-11
Marsha A. Black	WFO LUB	New Hire	ASA, GS-7
Kevin Simmons	WFO FFC	New Hire	El Tech, GS-11
Kurt Van Speybroeck	WFO BRO	Reassignment from BRO	SOO, GS-13

Within Region Transfers/Actions			
<u>Name</u>	<u>To (Office)</u>	<u>Action/Transfer</u>	<u>To Title/Grade</u>
Shawn Bennett	WFO BRO	Promotion from BRO	MIC, GS-14
Gerard Stevenson	WFO MLB	Promotion from MLB	ESA, GS-12
John Metz	WFO CRP	Reassignment from CRP	WCM, GS-13
Alfred Sandrik	WFO JAX	Promotion from JAX	WCM, GS-14
Joanna South	SRH SOD	Promotion from FWD	ASA, GS-5
William South	WFO EYW	Reassignment from EYW	Senior Forecaster, GS-12